## UTILITY PLANT MECHANIC II

#### NATURE OF WORK

This is skilled mechanical work in the repair and maintenance of diversified utility plant equipment.

Work involves responsibility for the repair, maintenance and servicing of a wide variety of both conventional and specialized electrical and/or mechanical equipment in a utility plant. This work requires the use of the usual maintenance tools and also the use of special types of shop equipment, tools, gauges and machinery required for the maintenance and repair of mechanical and/or electrical equipment. Work assignments are received from a technical or an administrative superior either orally or in writing, and may include assisting in diagnosing the type or extent of work to be done. An employee in this class performs the actual repair, service or maintenance work, and any final tests or checks to determine that the work has been completed satisfactorily. Periodic assignments may require actual operation of treatment processes as a requisite for completing maintenance activities or during emergency situations. General supervision is received from a technical superior, and work is reviewed in progress and on completion. Supervision may be exercised over subordinate employees, including the assigning of tasks and inspection of work.

# **EXAMPLES OF WORK PERFORMED**

Diagnoses, adjusts, repairs and services a wide variety of specialized mechanical and/or electrical equipment including pumps, motors and power units in a utility plant; troubleshoots malfunctions and prepares lists of needed parts.

Performs routine preventative maintenance tasks on utility plant equipment and makes recommendations for updating procedures for the preventative maintenance program; performs repairs in accordance with work order instructions, equipment operating and maintenance manuals, blueprints and sketches.

Documents completed maintenance activities and/or maintains equipment records in computerized maintenance management system.

Coordinates maintenance activities with operations personnel so that treatment processes are not disrupted and area-wide plant instrumentation remains functional.

Makes adjustments to or operates process equipment at the direction of a technical or administrative superior.

Operates and controls process equipment utilizing existing control instrumentation from numerous locations at treatment facilities.

Overhauls and services utility plant assemblies and accessories such as hydraulic, engine generation, compressed air, vacuum and electrical controls, systems and components; performs installation of complex mechanical equipment and pumps according to vendor specifications and plans.

Performs tests to locate defects in operation and as a check before returning equipment and machinery to service; performs vibration analysis, computer alignment and dynamic balancing of equipment.

Performs welding and machine work incidental to completion of repair assignments.

Coordinates with other supervisors as needed to ensure efficient maintenance operations.

May perform general building and grounds maintenance including minor repairs, painting, mowing grass, trimming bushes and shoveling snow; may repair and service some automotive equipment.

Assists in clean-up of general maintenance work areas and areas where repair and maintenance tasks have occurred.

Performs related work as required.

## DESIRABLE KNOWLEDGES, ABILITIES AND SKILLS

Thorough knowledge of the construction, design, repair and adjustment of a wide variety of both conventional and specialized mechanical and/or electrical equipment.

Through knowledge of the usual maintenance tools, and the use of special types of shop equipment, tools, gauges and machinery used the in repair, servicing and maintenance of specialized mechanical and/or electrical equipment.

Knowledge of the operating principles and science of wastewater treatment.

Knowledge of established routines, practices and operation of equipment related to measuring and testing of wastewater treatment plant processes.

Knowledge of work hazards and safety precautions to be taken.

Ability to assess and maintain plant operations as it relates to meeting established discharge standards; to recognize and remedy plant malfunctions and disorders; and to act quickly and accurately under emergency conditions.

Ability to determine equipment efficiency or condition by inspection as it relates to original design standards.

Ability to detect by inspection any worn, defective or improperly adjusted part of the assembly.

Ability to follow oral and written instructions and to keep records of repair and service operations.

Ability to establish and maintain effective working relationships with co-workers and the general public.

Ability to read equipment manuals and work from blueprints and specifications.

Skill in the diagnosis of defects and failures of specialized equipment, and in the use and operation of specialized tools and equipment of the trade.

### DESIRABLE TRAINING AND EXPERIENCE

Specialized vocational/technical school training and thorough experience as a mechanic, including considerable experience in the repair and maintenance of specialized and standard mechanical and/or electrical equipment found in a utility plant.

## MINIMUM QUALIFICATIONS

Specialized vocational/technical school training and considerable experience as a mechanic, including experience in the repair and maintenance of specialized and standard mechanical and/or electrical equipment found in a utility plant; or any equivalent combination of training and experience which provides the desirable knowledges, abilities and skills.

#### NECESSARY SPECIAL REQUIREMENT

Possession of a valid Nebraska Class III Wastewater Treatment Plant Operator Certification.

Possession of a valid State of Nebraska driver's license when operating a vehicle is necessary for the satisfactory performance of assigned duties as deemed necessary by the appointing authority.

Approved by:		
	Department Head	Personnel Director